

ABSTRACT

Water and soil pollution by heavy metals is a very serious problem of nowadays. Since the beginning of industrial revolution, the concentration of heavy metals increased sharply in the environment. One way how to decontaminate soils and groundwaters is phytoremediation that uses plants to remediate pollutants from the contaminated sites. This eco-friendly and cost-effective method exploits the ability of plants to take up, translocate, transform and sequester metals. In phytoremediation, the plants that are able to accumulate metals to high concentration are mainly used. These plants are named “hyperaccumulators”. Accumulation of metals by plants is affected not only by the capability of plant in question, but to a great extend also by the form and concentration of metal in the soil and environmental conditions.

The aim of this Bachelor thesis is to summarize knowledge on impact of heavy metals on biochemical changes in plants, with special emphasis on changes in carbohydrate metabolism.